

CLAIMS

What is Claimed is:

- 1 1. An apparatus for providing true geodetic coordinates of a target position (TGT) using an
2 image database comprising:
3 a portable personal computing device having means to accept input, and output data
4 and commands; and,
5 a processor configured to execute a process corresponding to said input, output data
6 and commands, said process comprising,
7 accepting input of true geodetic coordinates of an own position (OP);
8 accepting input of raw coordinates of a reference point (RP);
9 accepting input of true coordinates of RP from user, said true coordinates of RP
10 being obtained from said image database;
11 computing exact local magnetic declination variance between said raw
12 coordinates of RP and said true geodetic coordinates of RP;
13 accepting input of raw coordinates, inclination and range of said target position
14 (TGT);
15 computing the true geodetic coordinates of TGT utilizing the exact local magnetic
16 declination variance; and
17 outputting the true geodetic coordinates, inclination and range of the TGT .
- 1 2. The apparatus of claim 1 wherein said portable personal computing device comprises a
2 Compaq (Hewlett-Packard) IPAQ TM model 3650.

1 3. The apparatus of claim 1 wherein said image database comprises the Digital Point

2 Positioning Database (DPPDB).

1 4. The apparatus of claim 1 wherein said true geodetic coordinates of said own position

2 (OP) are obtained from said image database, a Global Positioning System (GPS) receiver,

3 an Advanced Targeting Forward Looking Radar (ATFLIR) image, a Low Altitude

4 Navigation and Targeting Infrared for Night (LANTIRN) pod, or the FalconView

5 mapping system.

1 5. The apparatus of claim 1 wherein said geodetic coordinates are in the World Geodetic

2 System 1984 (WGS-84), the Military Grid Reference System (MGRS), or like reference

3 system.

1 6. The apparatus of claim 1 wherein said raw coordinates of a reference point (RP) and said

2 raw coordinates of target (TGT) are obtained utilizing a Laser Range Finder (LRF).

1 7. The apparatus of claim 1 wherein said true coordinates of OP and RP are obtained from

2 said image database.

1 8. The apparatus of claim 1 wherein said true coordinates of OP and RP are obtained from

2 said image database by utilizing the Precision Strike Suite (PSS).

1 9. A method for providing true geodetic coordinates of a target position (TGT) using an
2 image database comprising:
3 providing a portable personal computing device having means to accept input, and
4 output data and commands;
5 providing a processor configured to process said input and said commands, said
6 process comprising,
7 accepting input of true geodetic coordinates of an own position (OP);
8 accepting input of raw coordinates of a reference point (RP);
9 accepting true geodetic coordinates of the RP, said true coordinates of RP being
10 obtained from said image database;
11 computing exact local magnetic declination variance between said raw
12 coordinates of RP and said true geodetic coordinates of RP;
13 accepting input of raw coordinates, inclination and range of said target position
14 (TGT);
15 computing the true geodetic coordinates of TGT utilizing the exact local magnetic
16 declination variance; and
17 outputting the true geodetic coordinates, inclination and range of TGT.

1
1 10. The method of claim 9 wherein said portable personal computing device comprises a
2 Compaq (Hewlett-Packard) IPAQ TM model 3650.

1 11. The method of claim 9 wherein said image database comprises the Digital Point

2 Positioning Database (DPPDB).

1 12. The method of claim 9 wherein said true geodetic coordinates of said own position (OP)

2 are obtained from said image database, a Global Positioning System (GPS) receiver, an

3 ATFLIR image, a Low Altitude Navigation and Targeting Infrared for Night (LANTIRN)

4 pod, or the FalconView mapping system.

1 13. The method of claim 9 wherein said geodetic coordinates are in the World Geodetic

2 System 1984 (WGS-84), the Military Grid Reference System (MGRS), or like reference

3 system.

1 14. The method of claim 9 wherein said raw coordinates of a Reference Point (RP) and said

2 raw coordinates of target (TGT) are obtained utilizing a Laser Range Finder (LRF).

1 15. The method of claim 9 wherein said true coordinates of OP and RP are obtained from

2 said image database.

1 16. The method of claim 9 wherein said true coordinates of OP and RP are obtained from

2 said image database by utilizing the Precision Strike Suite (PSS).

1 17. A computer program product, embodied on a computer readable medium, for providing
2 true geodetic coordinates of a target position (TGT) using an image database comprising:
3 computer code embedded in a portable personal computer (PC) having a computer
4 program code causing said PC to interface with a user and with other electronic
5 medium;
6 computer code for accepting input and commands and for outputting data;
7 computer code to execute a process corresponding to said input and commands, said
8 process comprising,
9 accepting input of true geodetic coordinates of an own position (OP);
10 accepting input of raw coordinates of a reference point (RP);
11 accepting input of true coordinates of RP from user, said true coordinates of RP
12 being obtained from said image database;
13 computing exact local magnetic declination variance between said raw
14 coordinates of RP and said true geodetic coordinates of RP;
15 accepting input of raw coordinates, inclination and range of said target position
16 (TGT);
17 computing the true geodetic coordinates of TGT utilizing the exact local magnetic
18 declination variance; and
19 outputting the true geodetic coordinates, inclination and range of TGT.

1 18. The computer program product of claim 17 wherein said portable personal computer (PC)
2 comprises a Compaq (Hewlett-Packard) IPAQ TM model 3650.

1 19. The computer program product of claim 17 wherein said image database comprises the
2 Digital Point Positioning Database (DPPDB).

1 20. The computer program product of claim 17 wherein said true geodetic coordinates of said
2 own position (OP) are obtained from said image database, a Global Positioning System
3 (GPS) receiver, an Advanced Targeting Forward Looking Radar (ATFLIR) image, a Low
4 Altitude Navigation and Targeting Infrared for Night (LANTIRN) pod, or the
5 FalconView mapping system.

1 21. The computer program product of claim 17 wherein said geodetic coordinates are in the
2 World Geodetic System 1984 (WGS-84), the Military Grid Reference System (MGRS), or
3 like reference system.

1 22. The computer program product of claim 17 wherein said raw coordinates of a reference
2 point (RP) and said raw coordinates of target (TGT) are obtained utilizing a Laser Range
3 Finder (LRF).

1 23. The computer program product of claim 17 wherein said true coordinates of OP and RP
2 are obtained from said image database.

1 24. The computer program product of claim 17 wherein said true coordinates of OP and RP
2 are obtained from said image database by utilizing the Precision Strike Suite (PSS).